

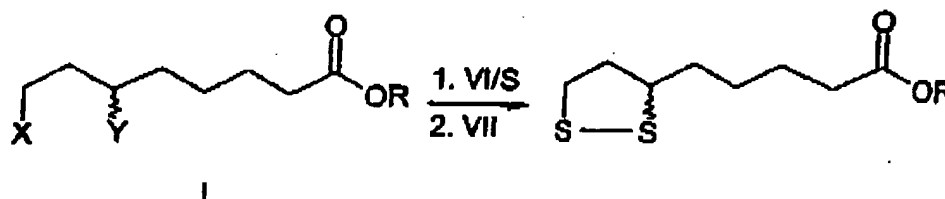
RECEIVED
CENTRAL FAX CENTER
MAR 30 2007

Applicants: Gunter LABAN et al.
Attorney's Doc.No. 42804-205435

IN THE CLAIMS:

The following listing replaces all prior versions of the claims.

1. (Original) A method for producing racemic, R- or S-thioctic acid or mixtures thereof of the general formula III, characterized in that the solution of a sulfide of the general formula VI is metered into a mixture consisting of suspended sulfur and a solution of a racemic, (R)- or (S)-6,8-disubstituted octanoic acid, the corresponding alkali metal salts, alkyl esters and mixtures of the general formula I, in which X, Y, R and R' have the meanings stated below, and then, optionally during or after the hydrolysis of an ester II formed as an intermediate, a sulfite of the general formula VII is allowed to act.



X, Y = Cl, Br, $\text{OSO}_2\text{R}'$
R' = C_{1-4} -alkyl, aryl
R = H, K, Na, C_{1-4} -alkyl

II R = C_{1-4} -alkyl

III R = H

M_2S

VI

M = K, Na, NH_4

$\text{M}'_2\text{SO}_3$

VII

M' = K, Na, NH_4 , Mg/2, Ca/2, Ba/2

2. (Previously presented) The method as claimed in claim 1, characterized in that the molar ratio I : VI : sulfur : VII is 1 : 1 : 1 : 0.5 to 1 : 1.5 : 2 : 3.
3. (Original) The method as claimed in claim 1, characterized in that, with the use of the racemic, (R)- or (S)- 6,8-disubstituted octanoic esters or mixtures thereof of the general formula I (R = C1-4-alkyl), the initially formed racemic, R- or S-thioctic ester of the general formula II is hydrolyzed to give racemic, R- or S-thioctic acid or mixtures thereof of the general formula III.
4. (Original) The method as claimed in claim 1, characterized in that the sulfide of the general formula VI is metered in in the form of an aqueous or aqueous alcoholic solution.
5. (Original) The method as claimed in Claim 1, characterized in that the polar aprotic solvents, dipolar aprotic solvents, nonpolar solvent, mixtures of said solvents and mixtures with water are used as solvents for the compounds of the general formula I.
6. (Original) The method as claimed in claim 1, characterized in that the sulfite of the general formula VII is added as a solid salt or in the form of an aqueous solution.
7. (Canceled)
8. (Canceled)

9. (Previously presented) The method of claim 2, characterized in that the molar ratio I : VI : sulfur : VII is 1:1.1:1.5:1 to 1:1.1:1.5:2.
10. (New) A method for producing pure racemic, R- or S- thioctic acid or a mixture thereof comprising the step of hydrolyzing a crude racemic, R- or S- thioctic ester of the general formula II in a two-phase system cyclohexane or methyl tert-butyl ether / dilute alkali solution in the presence of a sulfite of general formula VI, as recited in claim 1, at temperatures of 30- 90°C.
11. (New) A method for producing pure racemic, R- or S- thioctic acid or a mixture thereof comprising dissolving a crude racemic, R- or S- thioctic acid of general formula III, as recited in claim 1, in dilute alkali solution and stirring with a sulfite of general formula VII, as recited in claim 1, optionally in the presence of inert solvents.